

# The Effectiveness of Fiscal and Monetary Policy to Respond Challenges of Sustainable Venture Business

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## ABSTRACT:

One of the most significant challenges for modern society is balancing its innovative and sustainable development directions. On the one hand, venture businesses play a crucial role in the challenges we face globally and at the national level. On the other hand, the world faces increased capital for sustainable investment. In particular, recent trends prove the increasing need to encourage venture businesses to balance between commercial effect and sustainable practices implementation, responding to various challenges. In particular, recent trends prove that governmental policies play an increasing role in responding to the challenges of sustainable venture business. Therefore, the research problem is disclosing fiscal and monetary policy instruments as a practical possibility to boost sustainable venture business development. The paper aims to provide evidence on specific features of “traditional” and sustainable venture business. The study analyzes the challenges of sustainable venture business development, providing possible strategies to avoid them. The results section presents findings to determine the potential of different fiscal and monetary policy instruments for responding to the challenges of sustainable venture business.

*Keywords: sustainable development, venture business, sustainable venture capital, fiscal and monetary policy, venture financing.*

## 1. Introduction

The venture capital landscape is significantly growing nowadays. In particular, by OECD statistics the volume of venture business support has increased almost five times since 2017 (OECD, 2023). Venture business is connected with some popular trends, including sustainable investment attractiveness boosting its strengthening due to the recent trends of social and economic awareness in a time of global difficulty (Five..., 2023). Namely, such sustainable development practices became widespread. As a result, venture business started its development within the sustainable business model, aiming to increase the sustainable value of the company, delivering such value most appropriately between customers and other stockholders. This provides background for capturing social value along with the economics one, maintaining economic, social, and environmental capacity.

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These tendencies also influenced the volume and structure of investments for venture funding purposes. Existing research recognizes the critical role played by sufficient funding in overcoming an even tougher challenge for sustainable venture businesses (Olteanu and Fichter, 2020).

Therefore, there is an urgent need for an appropriate governmental policy to increase the acknowledgment of sustainable investment opportunities for venture businesses (Wöhler and Haase, 2022). In particular, the national monetary and fiscal policies are highly influenced by the sustainable development concept. For instance, the European Central Bank defines the issue of sustaining financial development and price stability in Europe as one of the main goals of its activity (Kiseľáková *et al.*, 2020). The effectiveness of fiscal and monetary policy influences all basic sectors of social and economic life, including the tendencies of inflation, the situation within the employment market, total economic growth and overall stability, etc. Thus, the possibility of defining the particular influence of fiscal and monetary policy on sustainable venture business is one of the primary areas of interest within social and economic research.

Several studies have found an association between venture business development and the sustainability aspect. In particular, there is evidence that sustainability plays a vital role in modern venture investors' activity. The issue of attracting funding from various sources to develop venture startups is highlighted in the works of Markopoulos and Cacciolatti, who draw attention to the peculiarities of the activities of venture startups in conditions of limited resources (Markopoulos, 2019; Cacciolatti, 2020). In the research of several authors, the role of venture capital in the process of building startups is defined. It emphasizes the need to finance venture startups for the further development of innovative infrastructure and the social sphere (Kinash, 2019; Gernego *et al.*, 2019). Some start-ups develop socially responsible initiatives and Greentech (cleantech) initiatives in deep cooperation with cleantech and socially responsible investors.

The influence of fiscal and monetary policy on sustainable venture businesses has strong connection with the nature of government–private sector interaction that varies across different economies. This caused the need to consider national cases. In particular, there is successful case of the High-Tech Gründerfonds (HTGF) activity that is a public-private venture capital investment company since 2005. The HTGF is developing its activity, creating government–private sector partnerships with several universities and public research centres in Germany (Hilao, 2022). In France, the sustainable venture business was based on government–private partnership during the COVID-19 crisis. The government guaranteed the loan for SMEs impacted by the COVID-19 crisis. Such scheme covered about 90% of the total volume of loans for SMEs. The sustainable venture business development in the United States is highly connected with fiscal incentives for innovation, including investment tax credit and production tax credit for cleantech startups (OECD, 2022).

However, on the other hand, there is a number of research and surveys that recognize a rather low range of venture capital attraction for sustainable business support (Fichter and Olteanu, 2022). Therefore, it is defined a lot of studies at the national and regional levels to modernize the appropriate policies and to straighten the sustainable direction of venture investors' activity. For instance, such an area of research has become popular within German national policy in part of straightening the strategy of improving access to finance

for green and social-oriented innovators, stimulating the responsibility of financial institutions and other investors (Die Bundesregierung, 2020). On the regional level, the facilitation of sustainable development support is conducted by the European Union, establishing targets to facilitate investments for sustainability-related innovators (European Union, 2020). Recent studies have shown that monetary policy aims to respond to challenges within financial markets, supporting their sustainable development (Kiseľáková et al., 2020; Gernego et al., 2022). United Nations experts have investigated that in COVID-19 times the proper fiscal and monetary policies enabled economies of developed countries to return to their pre-pandemic development trends (United Nations, 2023).

The scientific problem of this article is the question if the appropriate national fiscal and monetary policies can be a driver for sustainable business. The hypothesis of the paper remains based on a complex view of the issue, concerning the instruments of fiscal and monetary policies to influence Greentech, socially responsible and ethical venture business development. The policy outcome assessment is made on national cases, considered by OECD.

The current paper aims to provide empirical and theoretical evidence for the claim that sustainable venture business can overcome its challenges, being driven by an appropriate fiscal and monetary policy at the state level.

The object of the research is the instruments of fiscal and monetary policies that are assisting in boosting the sustainable activity of venture businesses and investors. The subject is fiscal and monetary policy influence, contributing to an upward trend in sustainable venture business globally.

The research methodology is based on foreign and Ukrainian scientific literature and statistical data analysis (within the last ten years) to show a link between the effectiveness of fiscal and monetary policies and sustainable venture business potential. The critical role played by green investment within agriculture is defined based on primary data from international and Ukrainian investment reports on the green economy. The modern trends of green deals and appropriate investment trends for agriculture development are provided, using the methods of economic and mathematic modeling and dynamics. A combination of quantitative and qualitative approaches was used in the green investment analysis.

The study is a part of the research cycle on fiscal and monetary policies' role in post-COVID-19 rebuilding, and overcoming of social and economic challenges in our modern society. The practical implication is that results can be used within the national strategy of rebuilding, based on sustainability and venture business development.

## **2. Theoretical assumptions on sustainable venture business and trends of its development**

Venture business development is deeply connected with financial reward, accompanied by high risk. Simultaneously, the continuous growth creates more resources to finance further production of innovation and their sustainability increase (Labella-Fernández et al., 2021). Therefore, there is increasing importance in considering the possibility of balancing economic growth and sustainability (Figure 1). Innovations are considered new solutions, which develop a greener and more sustainable economy. The

peculiarity of the sustainable business development process is considering the sustainable aspect, and making innovative decisions. Traditional venture business aims to concentrate more resources to maximize its profit and achieve financial goals, while sustainable venture business tries to combine sustainability with the priorities of financial growth in the company.

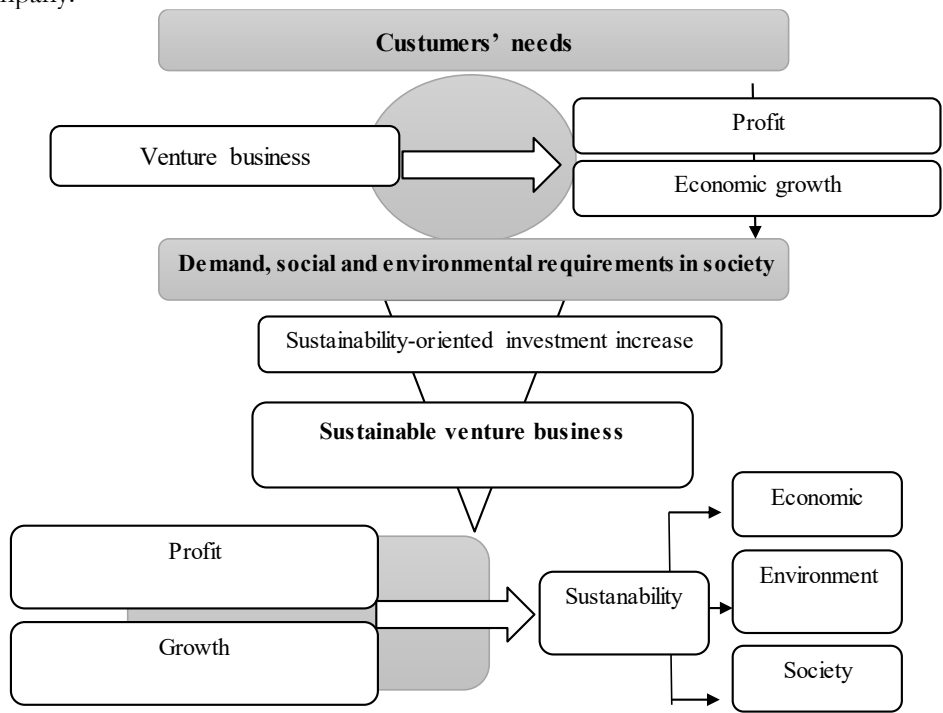
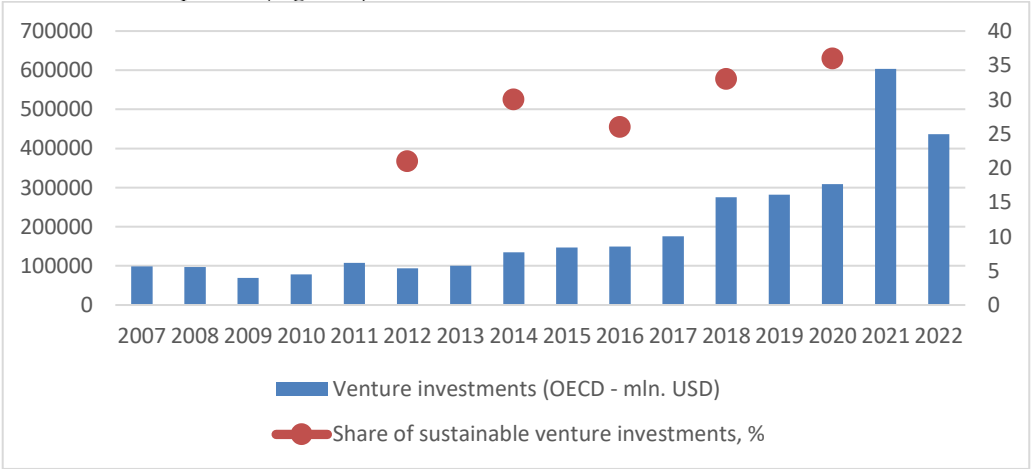


Fig. 1. – *Balancing of venture growth* (Westerhof, 2022)

Currently, there are increasing global trends of both traditional and sustainable venture business development (Figure 2).



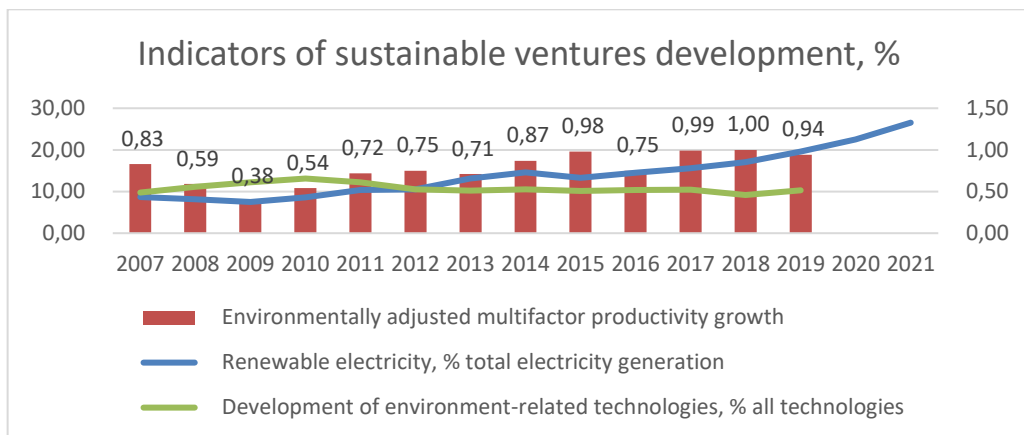


Fig. 2 and 3. – Global trends and indicators of sustainable venture business development (OECD, 2023)

However, the changeable and complex nature of sustainability issues causes limited information on the way of balancing between growth and sustainability. The real-world policy outcomes of sustainable venture business development may be presented through the analysis of appropriate governmental policies across different countries, following COVID-19 pandemic. The successful business recovery and sustainable development in the UK was supported by partnerships between the UK government, the Department for Business, Energy and Industrial Strategy and the British Business Bank. Private banking institutions got their benefits from the usage of government-guaranteed loan schemes. The Turkish government created a legal base for strengthening sustainable venture business financing, including legal basis regarding funds of funds, which enables the Ministry of Treasury and Finance to transfer capital to a fund of funds and venture funds under certain conditions. The Swiss Federal council adopted a measure of programs to support business sustainability and SME's innovation, including credits through a guarantee program specific for start-ups (OECD, 2022).

The governmental policies, influencing sustainable venture business financing, aim to stimulate the appropriate venture investors' behavior trends. In accordance with Roland Berger research as of 2023, about two-thirds of respondents reported a significant increase of the integration of climate-related issues into venture investors' activity. About 26,5 % of investors noted a slight increase of climate-related issues into their decision. Around 11,8 % of investors reported radical increase of their interest in climate-related issues. No respondents indicated climate neutrality or inaction within venture capital market. 85,3 % of investors consider companies climate impact in their screening process (Roland Berger, 2023). Thus, the sustainability trend is a significant one within the global and national venture capital markets.

### 3. Challenges for sustainable venture business development

The growing attention should be paid to the businesses that face several unique challenges, which are typical for sustainable venture businesses both in terms of their business model and financial considerations (Table 1).

**Table 1:** Sustainable venture business challenges (Chugunov et al., 2021; Simionescu, 2017)

Group of challenge	Challenge	Description	Possible strategies to avoid these challenges
Business	Market Uncertainty	Uncertain demand for sustainable products and services. In 2021 – 2023 years Deloitte conducted three phases of research about attitudes and actions related to climate change and sustainability. As a result, the level of personal activity to address climate change fell from 65 % to 53 %, and the share of respondents, who worried about sustainability decreased from 57 % to 43 %.	Development of strong marketing and branding strategies, aiming to increase stakeholders' acknowledgment of sustainability advantages.
	Regulatory compliance	Sustainable ventures may be subject to strict environmental regulations. Global widespread sustainability tendencies cause the increase of various pollution control strategies' role in governmental policies, including activity to avoid environmental degradation, environmental taxation policy, etc.	Advocacy efforts, influencing policy and regulatory changes, supporting sustainability
	Lack of Infrastructure	Limited recycling facilities and available renewable energy sources	Strategic partnerships
Finance	High Initial Costs	It is complicated to attract sufficient investments for sustainable venture start-ups. Typically investors are ready to satisfy only about 25-50 % of sustainable venture start-up needs.	Conducting efficiency and cost reduction policy
	Access to Capital	Capital intensity is one of the main characteristics of sustainable ventures. In practice, a significant amount of sustainable start-ups are still underfunded and underdeveloped in the context of the COVID-19 pandemic. It is connected with information asymmetry, lack of unique standards to support venture funds' activity, etc.	Continuously monitoring for potential investors to increase access to sustainable and green finance sources.
	Longer ROI Periods	Longer return on investment (ROI) is typical for sustainable ventures. Despite currently sustainable business becomes more considered to be oriented on ROI, it is focused on social and environmental effects.	Diversification policy

Due to sustainable development complexity, it is useful to define challenges and opportunities for sustainable venture business development in different sectors. One of the biggest challenges in energy industry is the mechanism of transition from traditional

fossil fuels to cleaner sources of energy. This creates the potential of investment increase into renewable sources of energy. Agricultural sector faces the greenhouse gas emission challenge globally. The green farming practices create the opportunities for sectoral investment attractiveness increase. Transportation sector contributes to the challenge of greenhouse gas emissions increase. Sustainable models of transportation create opportunities to attract financial resources (FasterCapital, n/d). There is a need to develop a strategic approach to overcome these challenges. In particular, challenges within both groups (business and financial) depend on the effectiveness of the partnership between private stakeholders and the public sector.

**4. Instruments of fiscal and monetary policies to respond to sustainable venture business challenges**

Despite contradictory findings on the issue of fiscal and monetary policies, they are considered practical instruments to increase public welfare and maintain macroeconomic stability. Therefore, it is reasonable to consider the combination of both policies and the coordination of different forms and instruments of fiscal and monetary regulation to overcome current social and economic challenges, increasing the competitiveness of business and national economy (Chugunov et al., 2021). In particular, it is defined that budget social expenditures and expenditures on technological adjustments are correlated with the real GDP growth rate (Simionescu, 2017). In addition, such impact depends on the effectiveness of different instruments of fiscal and monetary policy coordination (Table 2).

**Table 2:** A range of instruments of fiscal and monetary policies and features of their implementation

Policy	Instrument	Short description
1	2	3
Fiscal policy	Governmental spending	The government aims to stimulate economic activity through the encouragement of consumer and business spending. On the one hand, this means boosting spending on infrastructure, education, healthcare, etc. On the other hand, governments of developed economies manage venture capital funds by governmental agencies. The combination of these two directions of activity leads to the development of a self-sustainable venture capital market, which means the financial instruments implementation to achieve the goals of sustainable development (Matisone and Lace, 2020).
	Taxation	Tax policy influences both consumer and business behavior. Lower taxes provide the background for spending power increase. Higher taxes cool down some sectors of an overheating economy.
	Budget deficits and surpluses	Economic downturns and expansion can be regulated through the budget deficits and surpluses regulation. The increase in surpluses means the possibility to collect funding for investments. The budget deficit increase is connected

		with a reduction in savings, causing a lower level of investment (Koutche, 2021).
Monetary policy	Interest rates	The borrowing and spending process are also regulated by central banks, defining higher or lower interest rates. Borrowings are cheaper under the lower interest rates. This encourages businesses and consumers for further spending and investment (Penz et al., 2022).
	Open market operations	The control function of the money supply is conducted by central banks that can either buy or sell government securities, injecting money into the economy or reducing their supply. Open market operations are widely used in industrial countries as an advanced instrument of monetary control, providing or absorbing bank reserves in the context of sustainability stimulation.
	Reserve requirements	Boosting economic activity and social development is possible by holding particular reserve requirements. It is possible to get more funds for lending to both consumers and businesses by providing lower reserve requirements.

Thus, instruments of both fiscal and monetary policy are used to regulate the national economy, having an impact on social and economic processes. However, there are differences in the main peculiarities and functions of fiscal and monetary instruments used. Firstly, there is a difference in the type of authority, implementing fiscal and monetary instruments, because fiscal instruments are typical for governmental direct regulation. Monetary policy is realized through the central banks' activity, including management of money supply and interest rates. A measure of researchers pointed out that instead of direct financial support for sustainable venture development, it is reasonable to focus on creating an appropriate environment for sustainable venture prosperity increase (Lerner, 2010). Thereby, instruments of both fiscal and monetary policy have the potential to assist in the process of overcoming sustainable venture business challenges, including the implementation of the appropriate taxation and interest rate policies. However, it is worth paying attention to the impact of appropriate policies. In particular, fiscal policy has a rather long-term implementation than the interest rates policy (Figure 2).



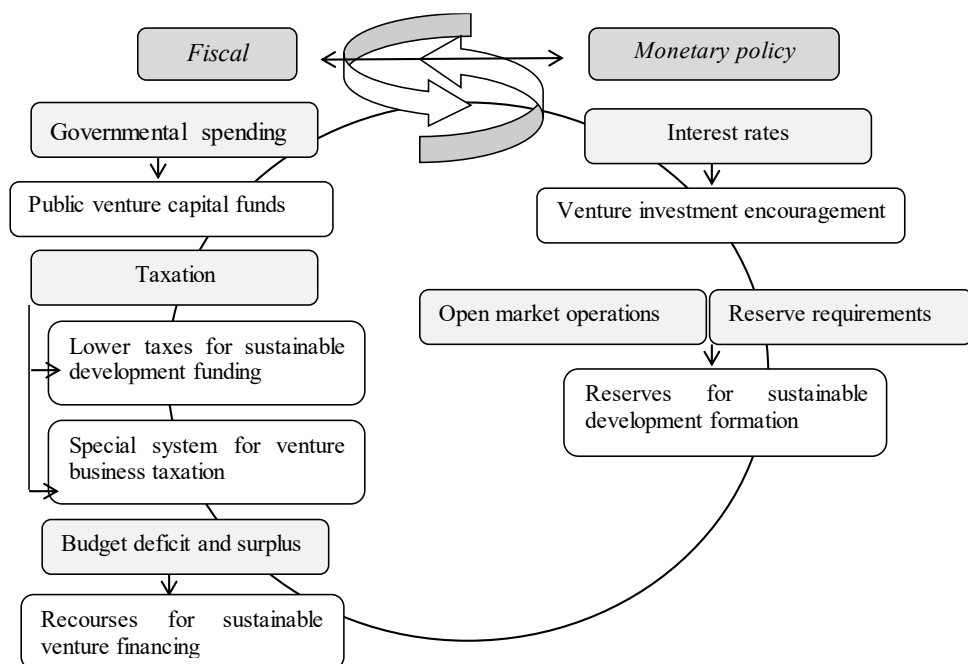


Fig. 4. – Features of the fiscal and monetary policies to boost sustainable venture business

Thus, sustainable venture business regulation is optimal in the case of fiscal and monetary policies' equilibrium, which may be estimated by Leeper model (Moreira et al., 2021):

$$\tau_t = \gamma_0 + \gamma b_t + \varphi_t \quad (1)$$

$$R_t = a_0 + a\pi_t + \mu_t \quad (2)$$

where  $\tau_t$  is defined as the fiscal policy rule and  $R_t$  is defined as the monetary policy rule;  $b_t = \frac{B_t}{p_t}$  is the real value, which is calculated as the one-period nominal government debt to the price level;

$\pi_t$  is the gross rate of inflation;  $\varphi_t$  and  $\mu_t$  are non-correlated first-order autoregressions; the author does not propose any restrictions for  $\alpha$  and  $\gamma$ .

In practice, there is a need to be concerned both global environment and the situation within the national economy, supporting the effectiveness of the integration process of fiscal and monetary policies. However, it is reasonable to pay attention to regional and national diversity of fiscal and monetary instruments and policies to boost sustainable venture business. In particular, developed economies may benefit from available resources for sustainable venture business stimulation through the governmental spending increase (fiscal policy). Monetary policy instruments may be rather attractive within emerging markets.

## 5. Conclusion

1. The first set of analyses examines the evidence on “traditional” venture business and sustainable venture business nature and their key functions. The sustainable activity of

venture businesses enables them to accelerate the availability of sustainable solutions through new technologies and innovations. This causes the increase of investment attractiveness of such projects, aiming to boost their commercial and social capability. Such tendencies create prospects for further research, which can describe potential ways of balancing between sustainability and commercial effect.

2. The research provides insights into specific challenges that are becoming typical for sustainable venture businesses, considering their “business” or “financial” nature. Thus, this provides an overview of sustainable venture business requirements within a complicated environment. Accordingly, it is reasonable to propose several strategies to overcome the above-mentioned groups of challenges most effectively. In particular, advocacy efforts, strategic partnerships, marketing, and branding may address the business challenges. Diversification of products and services, creating opportunities for cost reduction, and increasing access to sustainable and green finance address the financial group of challenges.

3. Analytical research shows that despite the private nature of sustainable venture business governments are still playing a rather active role in sustainable venture market development. Such regulation function should be implemented by balancing instruments of fiscal and monetary policies. For instance, fiscal instruments may be used for direct stimulation of the sustainable activity of venture business. Monetary policy aims to encourage venture investors to sustainability support.

The current article provides the general overview of global trends of sustainable venture business development along with fiscal and monetary policy to support these businesses. However, this is rather complicated issue, causing importance of further more detailed researches.

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